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MASTER OF MILITARY STUDIES

TITLE: THE FINNISH CAMPAIGNS: FAILURE OF SOVIET OPERATIONAL ART IN WORLD WAR II

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF MILITARY STUDIES

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Executive Summary

Title: The Finnish Campaigns: Failure of Soviet Operational Art in World War II

Author: Major Russell Harris, United States Marine Corps

Thesis: Soviet operational art failures in the Finnish campaigns of World War II were a result of dogmatic interwar ideology that emphasized rigid adherence to doctrine rather than a flexible approach that should have been crafted to meet the unique circumstances of each conflict.

Discussion: The Soviet Union is well-known for its development of operations as the linkage between tactics and strategy, and its application as operational art. It is commonly recognized that Red Army's development of deep battle during the interwar years and its refinement during World War II is an exceptional example of operational art and a testament to the genius of the Soviet Union's military theorists. Soviet-style operational art grew from an ideological concept at a theoretical level, to a political controlled strategic doctrine, emerged as an offensive biased operational mindset, and, if Finland is overlooked, resulted in World War II deep battle success. However, the Red Army's execution and application of operational art is overstated when viewed through the lens of the 1939-40 Winter War and later in the Finnish theater of World War II. Despite 20 years of theoretical development and recent combat in Manchuria, the Soviets were badly bloodied by the Finns during the Winter War. Further, after four years of war experience fighting the Germans and having arguably 'perfected' deep battle, they never achieved any real depth in the 1944 summer offensive that forced Finland out of the war. The Red Army achieved success in both campaigns against Finland through sound strategic planning, mass, and decisive tactical action. However, Finland's systematic withdrawal to prepared secondary positions prevented the destruction of its army – the key Soviet operational objective. Within five years the Soviet Union decisively defeated Finland in two wars, but failed to realize its doctrinal concept of deep battle and by its own definition operational art.

Conclusion: A direct corollary can be drawn between Soviet tactical success and her realization of strategic ends without achieving operational goals in the Finnish campaigns. This experience questions the validity of the importance Soviet doctrine placed on operational art and highlights the primacy of competent strategic planning.

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Preface

This paper is first and foremost an investigation of Soviet operational art, its development during the interwar years of 1925-1939, and its practical application in war. Combat operations in Finland just prior to and during World War II are the points of reference to measure effectiveness. The literature on the Soviet Union's relationship with Finland during this period is too compartmentalized and does not address any single unifying idea. This MMS addresses both shortcomings by treating the entire period (1930-1945) and doing so via the single theme of operational art. This analysis tells us much about the goal of preparing for war during periods of peace, offering insights that diminish the Soviet claims of pioneering op art and suggesting that getting lessons right in the interwar period to better fight the next war is not something that is entirely possible or even desirable.

Much of the secondary material encompasses the development of Soviet military doctrine as a determined and deliberate split from tsarist and imperial military theory to something uniquely Soviet. The advent of a Soviet theory of war is firmly rooted in Marxist-Leninist teaching and materials were mostly from Soviet sources. Key among those was Yuri Korablev's 1977 book, Lenin - Founder of the Soviet Armed Forces, in which he describes Lenin's understanding of warfare and his mentorship in developing the Red Army during the 1920's. This book provides a great deal of understanding and conceptualization of the foundational teaching from which Soviet military theory and doctrine were subsequently developed for those unfamiliar with Marxist-Leninist thinking. It also rationalizes the correlation between the class struggle and warfare. In the first chapter, Korablev illustrates Lenin's early writings, and provides an understanding of the strategic value of the population and the nature of Soviet warfare inherently being a means of spreading socialism – two themes constantly repeated by Soviet theorists. Also

of note is Chapter Seven. Here Korablev underpins Lenin's military principles as a reflection of strategic potential and Lenin's reflection on Clausewitz's definition of war from a Soviet perspective.

V. E. Savkin's The Basic Principles of Operational Art and Tactics (A Soviet View), published in 1972, offers an overview of Soviet doctrine development, the most significant theorists, and what each contributed to military thinking. Key to this paper is the sub-chapter dedicated to Soviet military works from 1917-1940. Primary source material from Soviet theorists, some of whom are also referenced by Savkin, is available in Selected Readings in the History of Soviet Operational Art compiled by Harold S. Orenstein for Soviet Army Studies Office at Fort Leavenworth, Kansas. This compilation of essays focuses on the development of Soviet doctrine during the interwar period. In addition to describing strategy, operational art, and tactics, the writings provide a view into the contemporary issues and political underpinnings of that era. Many of the essays were published after Stalin's death, are particularly insightful, and provide a critical view of strategic Soviet military and political decisions. Lastly, Volume Three of *The Voroshilov Lectures – Issues of Operational Art* provides a comprehensive description of roles and responsibilities of Soviet operational-level units (fronts and armies) in combat operations. Primary source material on Soviet thinking of op art is not emphasized in this MMS, only due to practicality. Records such as Alexander Svechin's, Strategy, and Vladimir Triandafillov's, The Nature of Operations of Modern Armies, may have proved useful, but time restrictions prevented their incorporation in this thesis. Even if this step were taken, however, the author believes that such research would not significantly change the conclusions in this study because of Stalin's heavy handed communist dogma at the time they were written.

For the western perspective of the development of Soviet armed forces over this time period, D. Fedotoff White's, *The Growth of the Red Army*, published in 1944, provides a less biased observation of the relationships between the Soviet military theorists. He clearly describes Fruenze's, Trotsky's, and Svechin's opposing points of view on the early development of doctrine, command, and mind set of the Red Army. In addition to the political implications the new leadership of the Soviet Union had on doctrine and military thinking, White also provides a concrete listing of the size and reorganization of the military through the interwar years. Lastly, he details the impact of industrialization and the growth of the Red Army just prior to World War II.

David M. Glantz's *Stumbling Colossus* was a primary source covering the state of the Red Army during the immediate period leading to World War II. Glantz details the growth of the Soviet military as it struggled with the leadership void left by Stalin's purges of the officer corps, a fractured mobilization, and The Soviet Union's incomplete efforts to build military infrastructure. It highlights shortfalls in training and weapons systems, and a coherent defensive military strategy against Germany's maneuver warfare tactics. Glantz's other extensive works on the Soviet Armed Forces are referenced widely by scholars in materials dealing with strategy, doctrine, and tactics, and provides a comprehensive understanding of the Red Army's development, methodology, and application of its military might.

Unlike Soviet military theory, most of the material on the fighting in Finland is from western sources. There are, however, some references by contemporary Soviet military leaders on the execution of the campaigns as points of clarification or examples of shortfalls in manuscripts and essays on doctrine. Because of this, James Anzulovic Jr's 1989 dissertation, *The Russian Record of the Winter War*, 1939-1940: An analytical Study of Soviet Records of the War with Finland

from 30 November 1939, provided the best perspective on the Soviet account of the Winter War. This work's main sources were five Soviet newspapers and their reporting before and during the campaign. Because Soviet print was heavily tainted with propaganda, Anzulovic contrasted Soviet reporting with western materials for accuracy. Though his work is focused on examining the accuracy of Soviet reporting, his work provides insight into the military and political strategic understanding of the nature of the war and its strategic objectives.

Western accounts of the Winter War are heavily influenced by Finland's ability to resist the behemoth Soviet Union both politically and militarily. Although historically accurate, there is bias towards criticism of the Red Army. For example, in his book *The White Death*, Allen Chew faults the Red Army for a lack of preparation and ineptness in their execution of the early stages of the war. Conversely, he highlights Finnish persistence and, daring and superior tactical leadership for their early success and ultimate triumph in maintaining independence.

Lastly, and significant in this thesis is Alexander O Chubaryan and Harold Shukman's *Stalin* and the Soviet-Finnish War (1939-1940). It is the verbatim translation of the "Meeting of the Command Personnel at the Central Committee at the All-Union Communist Party (Bolshevik) for Collecting Experience in the War Against Finland, 14-17 [April 1940]" that discussed the execution of the war. The candid observations and recommendation by battlefield commanders provides tremendous insight into the state of the Red Army before the war, shortfalls in the war's execution, and the changes instituted by the Soviets just prior to hostilities with Germany. This document reveals the poor state of the tactical competence of the Soviet military and the excessive influence of the Party, and especially Stalin, on tactical issues. More importantly, the lack of attention given to operational art hints that the Soviets either did not learn many lessons in this arena, or that they did not or could not place that much importance on it.

Overall, the documentation and literature make clear that the Soviet Union gave operational art significant attention, but their experience with conflict from 1930-45 is a record of mixed success. Western theorists have given the Soviet Union too much credit for having used operational art to defeat Germany during the Second World War. This was the end result, of course, but the role of operational art needs closer attention due to the fact that Soviet experience on the Finnish front does not support such high praise. In totality, the Soviets did not get the next war right, a needed caution when one showers praise on the Soviet war machine that emerged during the Second World War. This caution should be heeded today as the United States considers how to fight the next war. Doctrine and operational art are key elements of warfighting to study, but the Soviet experience is not one of success, but at best, limited success. Freeing the U.S. military from this mirage is considered a key point of analysis in order to unshackle military planners from undo baggage of the past. Complexity in thinking is valued, dogmatic lessons of the past is shunned. It is a distinction military leaders should keep foremost in their minds.

INTRODUCTION

The Soviet Union is well-known for its development of operations as the linkage between tactics and strategy, and its application as operational art. It is commonly recognized that Red Army's development of deep battle during the interwar years and its refinement during World War II is a shining example of operational art and a testament to the prowess of the Soviet Union's military thinkers and leadership. However, the Red Army's execution and application of operational art is overstated when viewed through the lens of the 1939-40 Winter War and later in the Finnish theater of World War II. Despite 20 years of theoretical development and recent combat in Manchuria, the Soviets were badly bloodied by the Finns during the Winter War. Further, after four years of war experiences fighting the Germans and having arguably 'perfected' deep battle, they never achieved any real depth in the 1944 summer offensive that forced Finland out of the war. The Red Army achieved success in both campaigns against Finland through sound strategic planning, mass, and decisive tactical action to breaking through the Finnish defenses. However, Finland was able to systematically withdrawal to prepared secondary positions to prevent complete destruction of its army – the key Soviet operational objective. A direct corollary can be drawn between Soviet tactical success and her realization of strategic ends without achieving operational goals. The Finnish experience questions the validity of the importance Soviet doctrine placed on operational art and highlights the primacy of competent strategic thinking and planning. This MMS will examine the application of Soviet doctrine in Finland during World War II, highlight how Soviet interwar development of operational art was not the determining factor in achieving success in those campaigns, and question the widely held belief that Soviet victory against Germany singularly defines her operational art during World War II.

SOVIET OPERATIONAL ART

During the interwar years the Red Army focused considerable effort in development of the linkage between tactical engagements and strategic goals. Its leading military thinkers of the time recognized that future war would not be fought on a linear battlefield, but rather fought over extended areas on the enemy's frontlines, rear, and strategic reserve areas. This concept was refined during the 1930s and evolved into the concept of 'deep battle.' Deep battle's basic premise was to penetrate an enemy's defenses and quickly push mechanized and airborne forces deep into the enemy's rear area in order to seize key terrain or objectives. Linking these deep strikes along a front or along multiple fronts in order to destroy the enemy's army was the key to achieving strategic success and the foundation of Soviet operational art.²

Genesis

Soviet military doctrine was born from a combination of experiences from World War I and the Russian Revolution. Similar to the rest of Europe, The Soviet Union witnessed the destructive power of modern weapons and significant casualties. These experiences compelled military theorists to develop tactics that would minimize costly frontal attacks and would circumvent the stalemate of entrenched defensive positions. It also forced the Marxist thinkers to embrace western military developments and technology to maintain contemporary military capabilities. The Revolution, on the other hand, was the genesis for the Soviet strategic thought process. That war was marked by wide spread peasant revolts and mass support of the army. Early military thinkers believed future Soviet wars would be similarly "revolutionary" and would be a class struggle to free the oppressed. To this end the strategic depth of the population would provide manpower and material, and there would be no fear of operational exhaustion. In Clausewitzian terms, World War I provided the understanding of the changing characteristics of

war, while the Revolution provided the context for the unchanging nature of war. In the Soviet case, war would always evolve as a Marxist class struggle defined by a nation's economic, organizational, and moral strength.⁵

Among the early Soviet theorists, Lenin's influence on the early Red Army was paramount. He provided a clear focus on Marxism, but also a pragmatic flexibility to reap the benefits of capitalist technology. He believed in the need to create a unique Marxist armed forces organization based on Soviet military experiences – predominantly the Revolution. Early Soviet doctrine and organization clearly reflect both. However, the early years of developing doctrine saw considerable discourse on the political control and the form of Lenin's Marxist army. The preeminent debate emerged as whether to create the dependence of military doctrine solely on ideology. As the argument ensued, two camps emerged. Those that believed in a strictly Marxist character of war based on Soviet class struggle and those that believed that warfare could not be forecasted and the need to accept bourgeoisie experiences. This debate would certainly play well for Joseph Stalin in the 1930s when he used the anti-Marxist ideas it to oust military leaders in his bid to dominate control over the military.

Key Military Theorists

Although the defeat of the tsarist in the Revolution completely replaced the existing regime with a communist organization, early Soviet leaders recognized the military could not survive without retaining much of the loyalist military senior officer cadre. In addition to providing simple military competence, the former tsarist generals were responsible for developing military theory during the interwar years. Noted among them were: Leon Trotsky who espoused the acceptance of historical perspectives in doctrine, Mikhail Frunze who argued for a solely politically controlled doctrine, Mikhail Tukhachevsky who emphasized the mentality of the

offense and consecutive operations, and Alexander Svechin who was a proponent of the linkage between tactical battle and strategic objectives. Later, Vladimir Triandafillov, and Georgy Isserson were proponents of depth and maneuver. They expanded the concept of deep battle that was applied so successfully against the Germans in World War II.⁹ While these were not the only theorists and none were singly responsible for the above principles, they heavily influenced the early development of Soviet doctrine and operational art.

Trotsky's and Frunze's arguments comprised the first, and arguably the most significant, debate on the new Soviet military theory. Frunze emphasized the preeminence of the class struggle and proletariat control of the military. He believed that the "Party must be the final source of military doctrine" in order to fulfill the Marxist-pure theory of war. ¹⁰ Conversely, Trotsky understood that political dogma could not determine the form of warfare. His premise was that Marxism provided the structure and direction for military theory, but military professionals who studied warfare, it all its forms, must control the development of doctrine. ¹¹ Though his arguments were sound and effectively rejected those of Frunze, Trotsky lost momentum within the Red Army as he was forced to argue his support for former "tsarist military thinking" that was prevalent in his concepts. Although openly opposed by Lenin, Frunze's argument eventually emerged the victor, yoking military doctrine to ideology above strategic circumstances. ¹²

With the ideological side of doctrine firmly rooted in Marxism, follow-on theoretical debate focused on the actual execution of war. Operational art emerged as the tie between political control of military strategy and the execution of tactical battles. During the 1920's, Svechin and Tuckachevsky argued over the method of battle through which the Red Army could best apply this emerging concept. Tuckachevsky's views were strongly influenced by experiences during

both WW I and the Russian Revolution. He was a firm proponent of offense and annihilation through the decisive destruction of the enemy's army. ¹³ Svechin, as a supporter of Trotsky, had a more pragmatic theory that recognized that warfare could not be tied to a single concept and gave equal importance to annihilation as attrition, and offense as defense. This broad view accepted western military theory as practical and put him at odds with most of his contemporaries who espoused Frunze's uniquely Marxist theory. ¹⁴ Much as Trotsky before him, Svechin's ideas fell as anathema to class struggle and were rejected.

Accepting Tuckachevsky's theory over Svechin, during the 1930s the Red Army focused operational art on annihilation warfare and maneuver. Deep battle was developed from the basic understanding that wars could no longer be fought along a linear front with a single battle to achieve strategic objectives, but rather as a string of successive operations through the enemy's frontlines, destroying his rear area, and finally disrupting the strategic reserve. Deep battle is a joint operation that requires a penetration of tactical defenses and follow-on mechanized forces to exploit a tactical breach to achieve operational success. The initial stage is characterized by a combined arms action of infantry, tanks, artillery, and aviation along the enemy's entire depth in order to achieve maneuver space. Once a breach of the initial defenses (to include that unit's rear area) has been achieved, maneuver units (tanks, mechanized and motorized infantry, and air assaults) exploit the breakthrough with the ultimate objective of completely routing the enemy. 15 As the theory of deep battle was solidifying, the Soviet Union faced the growing potential for conflict with an aggressive and rearming Germany. This emerging threat heavily biased Soviet operational art towards a confrontation in Eastern Europe and the Red Army focused heavily on defeating German maneuver tactics. 16 What evolved was not simply theory, but the blueprint of how to execute what the Soviets believed was the next war.

Stalin's Purges

As discussed earlier, Marxist ideology and bourgeoisie influence in military affairs was sharply debated after the revolution. This left many Soviet senior officers vulnerable to attack by questioning their loyalty to the State. In his bid to gain total control over military affairs, Stalin began sacking officers that he considered in rival camps by the late 1920. In 1936 and after having placed loyal men in key places, to include sacking Tukhachevsky as the chief of the Red Army Staff for the more politically acceptable Boris Shaposhnikov, Stalin began the wholesale purging of former tsarist officers. ¹⁷ Over the next three years over 50,000 officers were killed, imprisoned, or expelled from military service. The casualties included 3 Marshals of the Soviet Union and 14 of 16 army commanders. ¹⁸ Most significant among the losses were many key military theorists (including Svechin and Tuckachevsky) and those officers who supported the doctrine they developed. The consequences were a rapid promotion of junior officers who were not qualified for the command billets they were filling, a hollow training cadre, and an officer corps conditioned to timidity and caution. The void left would have serious consequences not only the continued development of Soviet doctrine, but also in its execution during the early stages of World War II. 19 Further, Stalin rejected the idea that subordinate military leaders should be concerned with the realm of strategy. Writing of the void between strategic thinking and military application (operational art), Isserson stated:

The negative consequences of this were felt at the beginning of the war in 1941, when many within the high chain of command (of fronts and armies) were confronted with the necessity of independently examining large-scale situation and making serious decision of strategic significance. A certain confusion, and the inability to grasp a complex situation in its totality, to make expedient decisions on a large scale, and to subordinate the entire course of events to this were, to a significant degree, the result of a lack of strategic orientation and a lack of preparation to think in terms of large categories of strategic significance. ²⁰

Although Isserson's remarks are specific to 1941, it is reasonable to apply them to the Winter War, especially when considering The Soviet Union's piece meal efforts and poor performance in the operational art it so recently developed and is espoused as having mastered.

Operational art Soviet-style grew from an ideological concept at a theoretical level (Lenin), to a political controlled strategic doctrine (Frunze and Stalin), to an annihilation biased operational mindset (Tukhachevsky), and, if Finland is overlooked, resulted in WWII deep battle success (Isserson). While sound doctrinally, deep battle was rigid in execution. Planning was systematic and revolved around explicit force and time calculations. Espoused as operational art, it breaks down into mostly scientific terms unless executed by creative and independent leaders. In Finland, this meant that the doctrine developed specifically for war with Germany could not deliver success. The Finnish defenses and restrictive terrain did not support The Soviet Union's predisposed concepts of mobile warfare, the decisive breakthrough, or a mechanized exploitation. Unfortunately and with dire consequences, the Soviets, purged of the talented minds that developed many of our modern warfare concepts, committed to their doctrine like lemming in 1939.

THE WINTER WAR: INITIAL PHASE

In the prelude to the Russian-Finnish Winter War, Germany's rearmament and occupation of Austria and Czechoslovakia provoked the Soviet Union to look for a means to secure her western borders. During the summer of 1939, Germany and The Soviet Union began political negotiations that resulted in the Ribbentrop-Molotov Pact of 23 August 1939. The secret protocol of the pact, later amended on 28 September, divided Eastern Europe geographically between the two powers. The Soviet Union's portion was Eastern Poland, the three Baltic States of Latvia, Lithuania, and Estonia, and all of Finland. These countries provided The Soviet

Union maneuver space for the protection of Leningrad, but more importantly, time to mobilize its army.²³

The Red Army invaded Poland on 17 September and quickly occupied the country with little trouble and few casualties. The Baltic States capitulated to Soviet demands to sign mutual assistance pacts in September and October. ²⁴ The pacts allowed The Soviet Union to post troops and aircraft within their borders and to occupy naval bases. Of Finland, The Soviet Union demanded the border in the Karelian Isthmus be moved northwest to within 20 kilometers of Viipuri, the border on the Rybachi Peninsula moved west, the occupation of 4 Baltic islands, and leasing of the Hanko Cape naval base and allowing 5,000 troops to be posted there. ²⁵ Through a month of negotiations in October and early November 1939, Finland offered to accept most of the Soviet demands with the exception of leasing the Hanko Peninsula. ²⁶ Because of Hanko's importance as a key defensive position on the eastern Baltic, negotiations broke down and were formally ended in mid-November. With the northwestern approach to Leningrad still vulnerable, The Soviet Union turned to a military solution.

Invasion Overview

The Soviet attack began in the early morning of 30 November 1939 after an alleged Finnish cross border artillery strike against a Soviet village. The Soviet plan was a four-pronged invasion through the entirety of the country. The invasion forces under the command of the Leningrad Military District comprised four army groups of an estimated 500,000 troops. ²⁷ The goals were to quickly seize the northern port of Petsamo to cut off any military aid coming through Finland's only warm water port, to sever the rail lines from Sweden in the center of the country along the northern Gulf of Bothnia, and to occupy the major population centers located in the southern part of the country via the Karelian Isthmus and Lake Lodoga. ²⁸ Supported by newly

constructed roads and reinforced railheads leading to the border, the Soviets quickly seized their initial objectives.²⁹ The lightly defended frontier regions fell to the Red Army while the Finns scrambled to mobilize reserves and conducted a slow delaying action. By the end of the first two weeks, the Soviets had been halted and a month characterized by protracted attacks and counterattacks by both sides followed as the lines stabilized.

As a map exercise, the concept of operations was sound, but the Soviets made numerous strategic planning mistakes. They included failure to obtain maps and detailed intelligence on Finnish defenses that led to mismanaged unit deployments of forces; 30 mobilizing units that were only partially manned, were short equipment, and not prepared for combat; 31 and failure to recognize terrain that would impede operational employment of and follow-on logistics. 32 Additionally, the 7th Army, whose mission was the main effort, had about equal combat power as the Finnish II and III Corps it faced. Even if the 7th Army achieved a break through, it did not have the operational depth to exploit the breach. 33 These mistakes compounded with poor leadership and tactics lead to significant Soviet setbacks and tremendous losses in the first month of fighting. The initial phase of the war, despite having the outward appearance of operational art, was fraught with the revolutionary war style mass frontal attack tactics long held by Stalin's cronies.

Northern Finland

In the north, a single division of the Soviet 14th Army attacked the artic port of Petsamo from Murmansk. In an air, land, and sea operation, the Soviets quickly secured the port and began the 300-mile trek to Rovaniemi in central Finnish Lapland.³⁴ This effort was made significantly easier by the paltry initial defense the Finns could muster of only one company and a single battery of antiquated artillery.³⁵ Fraught with cold weather, hampered by logistical problems, and

confined to the roads, the Soviets were continually punished by Finnish ski-borne counterattacks. Although never reinforced past battalion strength, the Finns halted the Red Army's (strengthened to two divisions) advance approximately 100 miles south of Petsamo by late December where the lines stabilized for the duration of the war.³⁶

Simultaneously, the 9th Army's 122nd Division was attacking west through Salla towards Rovaniemi, which was a much shorter 100 miles, with the goal of linking-up with the 14th Army.³⁷ The Finnish 18th Independent Battalion delayed the Soviet advance, but by 10 December they were pushed beyond the city.³⁸ Reinforced by a second division, the Red Army resumed its westward push against seven Finnish battalions. The following two months of fighting were marked by flanking and counterattacks by both sides and little Soviet success. By late January the Soviets had been pushed back to defensive positions in Salla holding their position until the cease fire in March.³⁹ In northern Finland the Soviets operational failures were closely tied to a poor understanding of the terrain and the logistical consequences it presented. In his after action, the commander of the 14th Army, Corps Commander Frolov, cited the cold weather, heavily forested terrain, and poor roads as the largest impediments to operations.⁴⁰

Lapland

In the center of Finland, the 9th Army attacked in two directions toward the railhead at Oulu on the Gulf of Bothnia. The northern attack through Suomussalmi much like most of the fighting met little resistance and the Soviet 163rd Division easily seized the town by 7 December. Approximately 60 miles south, the Soviet 54th Division attacked northwest towards Oulu through the crossroads at Kuhmo. The Finnish 14th Independent Battalion resisted, but could only delay the inevitable with the Soviet's nearly reaching the town by 7 December. With the capture of the three cities of Salla, Suomussalmi, and Kuhmo the 9th Division had achieved all of its initial

objectives with little effort, and was positioned to split the country in half and cut support from Sweden.⁴⁴

The Finnish defense was reinforced and stiffened quickly. Occupying positions near Salla blocking the 163rd Division's advance and outnumbered 2 to 1, the Finns halted the Soviet push through a series of flanking and counterattacks. Lacking adequate supplies and with low morale among its soldiers, the division was driven back to Suomussalmi by late December. The 44th Ukranian Guards Division was thrown into the fight to reinforce the 163rd, but was halted, isolated, and systematically destroyed by early January. In Kuhmo, the Finnish turned to the offensive after their recent successes. Using flanking attacks they severed the 54th Division's lines of communications, and again isolated small units then attacked the division piecemeal. Only being reinforced by a ski-borne brigade and having been trained in winter woodland operations allowed the 54th Division to hold its isolated positions throughout the war.

Lake Ladoga

The southern attacks were more significant and divided into two axes – eastern Karelia and the Karelian Isthmus. In eastern Karelia, the Soviet 8th Army advanced with five infantry divisions and one armored brigade on three axes across a frontage of approximately 60 miles directly north of Lake Ladoga. ⁴⁸ This avenue of approach was immediately east of the southern population centers and threaten the rear of the Finnish main defenses on the Karelian Isthmus if breached. Anticipating this danger, the Finns had prepared for its defenses in peace-time exercises. ⁴⁹ However, not anticipating the strength of the Soviet attacks the Finns initially only committed the IV Army Corps. At the end of the first week of fighting the outnumbered and quickly demoralizing Finnish troops were pushed back 45 miles and lost the towns of Salmi, Pitkaranta, and Suojarvi. ⁵⁰

Fighting intensified as reinforced Finnish defenders counterattacked in mid-December. At each axis, the Red Army was halted. The northern axis, where the Soviet 155th Division made the greatest progress, saw the most successful counteroffensive in this area. The Finns, with no tanks and limited artillery dislodged the Soviets from their defensive positions and push them back to positions in line with the rest of the front. Just south, the Soviet 139th Division was also heavily engaged. Despite being reinforcing, the attack with four additional divisions the Soviets were not able to break the Finnish defenses. Though not the most heavily disputed area of the war, Finland without armor and limited artillery and from hastily build defensive positions were able to stop overwhelming Soviet forces.

Karelian Isthmus

The Karelian Isthmus was the Soviet main effort and had the most combat power allocated. Those forces included 120,000 troops, 1,000 tanks, and approximately 600 pieces of artillery.⁵³ The Soviets advanced eight divisions of the 7th Army, six of which were committed to the attack on Viipuri.⁵⁴ Unprepared, the Finnish frontier forces made feeble attempts to delay the Soviet attack; however, early fighting on the isthmus was marked by wide variances. In some areas the Red Army seized towns without firing a shot and in other areas there was reported house to house fighting.⁵⁵ Despite guerilla-type resistance and effective delaying tactics, the Finns were rapidly pushed back to the prepared defense positions of the "Mannerheim Line" by the end of a week's fighting. Soviet armor and overwhelming firepower could not be stopped by the beleaguered Finish defenders.⁵⁶

Unlike the fighting in the rest of the country, the Finnish defenses of the Mannerheim Line on the isthmus were deliberate and prepared in advance. They were on high ground, formidable, and well hardened in many areas. More importantly the area forward of the defenses was poorly suited for tanks to maneuver.⁵⁷ Through December the Soviets made repeated attempts to break through the Finnish defenses, however, the attacks were uncoordinated and isolated to discrete areas of the Mannerheim Line. Though some had limited success, each advance was repulsed by Finnish counterattacks. Partially to blame were the Soviet's poor tactics and failure to use combined arms effectively. The Red Army regularly attacked with massed infantry in frontal assaults and tank formations without infantry support. Further, artillery support was generally ineffective due to poor training, and limited forward observation.⁵⁸

SOVIET OPERATIONAL ART FAILURES

By early December, the Red Army had advanced rapidly, seized its initial objectives, and was poised to overrun Finland in the same fashion as they had in Poland. However, the Soviet advance stalled. Through December the lines remained basically static, with the exception of the center of the country where the divisions of the 9th Army were systematically destroyed or pushed back to early December lines.⁵⁹ To the credit of the Finns, they were able to rapidly reinforce their defenses at each axis of attack, but the Red Army always maintained a significant advantage in troops, weapons, and ammunition. Soviet doctrine of massing of troops to achieve a penetration of defensive lines and a follow-on exploitation to gain geographic objectives across a large front had been initially realized. They achieved the depth necessary for deep battle and operational art. Why after a month of fighting had the Red Army been held to a standstill by an underequipped and poorly manned Finnish defense? In his book White Death, Allen Chew postulates that Finnish leadership, highlighted by the fighting against the Soviet 8th Army, was the deciding factor. ⁶⁰ The Finns had credible leaders, but their influence in the war was predominantly tactical and cannot account for the total failure of the Red Army to achieve any of its strategic goals. As discussed earlier, Stalin's purges decimated the Soviet officer corps

leaving a void in proficiency as well as initiative. However, there were still many capable officers as the fighting would prove in January and February. More than simple poor leadership, the Soviets lacked foresight on a strategic level to understand the characteristics of the war in Finland and failed to execute the doctrine the Red Army had been developing for nearly 20 years. These shortfalls may have been avoided if military visionaries such as Svechin and Tukhachevsky had survived Stalin's reach. Less a result of Finnish leadership, failure was mostly an absence of Soviet vision. The Red Army's near complete focus on tactical considerations is evident in the Soviet post war commanders' meeting designed to collect experiences and lessons learned. Despite being chaired by Kliment Voroshilov, the People's Commissar for Defense, and attended by Stalin personally, most of the issues presented concerned tactics, weapons systems, and small unit training and discipline. Operational art was almost nonexistent and in general most references to strategy were only made to highlight Stalin's wisdom and sound decisions as a protective measure to remain in his good stead. The commanders' comments also highlight Stalin's control over the military establishment as criticism of anything above the tactical level would have been a direct attack on him. ⁶¹

Misunderstanding the Character of the War

First of the Red Army's shortfalls, was its complete failure to understand the character of the war they were entering. On a strategic level, and as Soviet doctrine is based on the Lenin-Marxist class struggle, the Soviets were convinced that the Finnish workers would reject their oppressive government and embrace communism as soon as the war began. Although there was support for communism within the country, independence (especially after only 20 years of freedom from The Soviet Union) far outweighed any single political ideology. Additionally, Stalin underestimated the ability of the Finnish Army to defend itself. He rejected the initial war plans

developed by then Chief of the Red Army General Staff Boris Shaposhnikov as an exaggeration of Finland's military capabilities. Undoubtedly the recent victory in Poland, Finland's small population base, and its antiquated war machine weighed heavily in the belief that the fighting would be localized and short. Shaposhnikov, however, recognized that the war would be a protracted and difficult struggle, but his insight was ignored for a revised plan that attacked the Finns in piecemeal and severely stretched the Red Army's logistics. Although deep battle was conceptualized during the interwar years, the Red Army as a whole did not have an institutional understanding of the idea and fell back on old revolutionary war tactics. This questions the idea that Soviet operational art was a product of the interwar years when they so completely failed to even think along the lines of deep battle in Finland and suggests it was more than simply refined in WWII against the Germans, but rather completely relearned.

From a service perspective, the Soviets failed to account for the nature of operations in a heavily forested artic environment. Because of the requirements for occupation forces in Poland, the Soviets were required to quickly mobilize units from other military districts. ⁶⁶ These troops were not trained, equipped, or prepared for combat operations in a cold weather environment. The soldiers were not clothed appropriately and unlike the Finns they did not have adequate tents and stoves resulting in significant numbers of exposure casualties. The Finns had a marked advantage in orienteering and cross country movement capabilities which made the Soviets particularly vulnerable to flanking and counter attacks. ⁶⁷ The Red Army also failed to recognize that the artic day is much shorter which not only intensified the cold the soldiers would endure, it severely restricted certain types of operations – most importantly aviation support. Lastly, the heavily wooded terrain made the Soviet tank superiority less effective and often times vulnerable

as movement was regularly limited to the road network. Though tactical considerations, solution to each can only be resolved at a higher level of leadership and planning.

Deep Battle Failures

The second area the Soviets failed was in employing fundamental deep battle concepts. The basic employment for deep operations required an operational formation (in this case a Soviet army) with two echelons – a combined arms group to break through the defenses and a mechanized group to develop the penetration. It also requires two forms of aviation support. Army aviation was to be used to prepare the battle field in a close air support role and frontal aviation was to disrupt the enemy's strategic reserve. Lastly airborne operations were necessary to seize key terrain or disrupt the enemy's reserve. ⁶⁸ The recent fighting in the Spanish Civil War and in Manchuria gave rise to an argument on how to execute deep operations. The specific character of these two conflicts did not reflect conventional doctrine and the Soviet Union disbanded its mechanized corps and slowed the development of long range (frontal) aviation.⁶⁹ While the Army maintained its mechanized capability it lacked an independent corps as an exploitation force. 70 The Air Force also retained a significant offensive capability, but it subordinated aviation assets to army commanders who used the majority of sorties in a ground support role. 71 Both capabilities were key strike forces in deep operations and there absence limited the Soviet's ability to successfully exploit breaks in the Finnish defenses. Although the operational plan had a main effort designated, it was still in essence a piecemeal attack across the entire country with each axis of advance expected to execute simultaneous deep operations.⁷²

Excluding the strategic and operational failures, the Soviets also ignored some of the basic tactical considerations for deep operations. They conducted multiple, independent linear attacks that were little better than World War I frontal assaults. Few received adequate artillery

preparation and combine arms actions were not emphasized. Tanks were regularly committed without infantry support, artillery was ineffective and failed to suppress defensive positions, and once penetrated, the enemy was not isolated to mitigate counter attacks. Lastly the Soviets failed to recognize the logistics burden of the stretched lines of operations. The Soviet's sloppy efforts at executing deep operations reveal that their concept of operational art was only in an embryonic stage of theoretical development in 1939. They would not realize the full potential of deep battle until after years of fighting against the Germans further suggesting that operational art was not so much a product of interwar development, but rather from hard lessons learned in combat.

SOVIET RECOVERY

At the beginning of the Winter War the Soviet Union had a nascent operational concept, but lacked an organizational understanding or acceptance of that theory. Military leaders made faulty strategic assumptions, had poor tactical training, and in execution, reverted to their Marxist ideological understanding of war and the legacy tsarist tactics of WWI. The result was a complete failure during the initial stages of the campaign. Success was later achieved through improved tactics and flexing the Soviet strategic capacity in manpower and production.

Winter War: Changes in Soviet Tactics

By early January the Soviet leadership came to the realization that they had failed to properly prepare for or properly execute the conflict and made sweeping changes in the war's leadership and command structure. The Leningrad Military District was re-designated as the Northwestern Front and Army Commander First Rank Semyon Timoskenko was placed in overall command of the Soviet 7th and newly formed 13th Armies on the Karelian Isthmus – still the main effort.⁷³ Concurrently, the war's operational planning began to adhere to the tenants of Red Army

doctrine. It identified the main attack, designated the area for the breakthrough, and assigned maneuver groups for exploitation. Throughout January there was a marked improvement in the training and equipment troops received. Unsupported frontal attacks were specifically restricted and the army as a whole saw a transformation in tactical success. Aviation and artillery prepared the battlefield with massed accurate fires before attacks with devastating results on the Finnish defenses. The Red Army artillery allocated 230,000 shells per day.⁷⁴ Units began employing combined arms techniques and tanks and infantry operated in support of one another. Lastly, lines of communication were greatly improved and logistics throughput was able to meet operational requirements.⁷⁵ Despite the reforms, the main Soviet tactic strategy continued to be one of overwhelming force whose efforts were aptly described as "masses of men and sheer weight of metal."⁷⁶

Soviet Success

The decisive Soviet advance began in early February. Operations in the north and center of the country were characterized as an economy of force to maximize the Soviet efforts in the main battle area. ⁷⁷ North of Lake Ladoga, the Soviets continued to apply pressure in both reinforced ground attacks and heavy artillery and air strikes. The Finns were able to hold their ground, but the Soviet offensive in this area was only to limit Finland's ability to reinforce against the main effort on the isthmus. ⁷⁸ On the Karelian Isthmus, the Soviet offensive began with 10 days of probing attacks followed by heavy artillery and bombing. The first serious attack began on 11 February and saw the first successful Soviet penetration on the western isthmus near Summa on the 13th. However, the advance stalled after only two miles because the exploitation force was not immediately prepared to attack. The Soviets recovered quickly and drove through the breach the following day, but the delay allowed the Finns to withdraw and regroup their defense. ⁷⁹ Over

the next three weeks the Soviets would repeat the same mistake because of poor command and control and lack of initiative from local commanders. Despite these failures and the Finnish defenders' ability to systematically retreat, the Soviets quickly pushed through the Mannerheim Line and a succession of secondary defensive lines to capture the city of Viipuri. Though the Red Army's advance stalled here, the Finnish army was in tatters. It could no longer conduct offensive operations and fighting ended in a cease fire on March 13th. 80

Soviet successes in the February offensive can be attributed to multiple factors. First and foremost was the change in leadership, strategic mobilization of forces, and the production of material for continued operations. Secondly, the Soviets recognized that their soldiers needed specific training and equipment to operate in the artic environment as well as a revitalization of combined arms tactics. Crucial in this change was the employment of mass artillery fires in front of and in support of advances. Finally, the hard fought lessons gained through combat operations significantly increased the Red Army's proficiency. Despite the success of the offensive, the Soviets still failed to execute the deep battle concept. Penetrations were never fully exploited and opportunities to achieve a quick victory by driving into the Finnish rear area were never achieved. Soviet casualties were enormous and momentum was only maintained by constantly replacing units and personnel.⁸¹ The Winter War was foremost a fight of attrition and Soviet operational art emerged as was nothing more than a series of heavy handed attacks that punished the Finns into submission. That the Finns could never expect to match the Soviet strategic advantage in forces was inevitable. Soviet operational art, specifically designed for open warfare in Eastern Europe was destined for failure in Finland's restricted terrain and cost the Soviets appalling losses.

Red Army Reforms

Despite the peace accords from the Winter War providing time and space to protect its western border, the Soviet Union recognized the dangers of their poor combat performance. First among the dangers was the once invincible Red Army, having been stymied by the militarily feeble Finns, was now viewed with much less regard from her European neighbors. On a practical point, the Soviets accepted that lack of training and poor leadership were critical factors that would need to be resolved for success in future conflict. Lastly, although Swedish neutrality limited hostile troop movements towards the Soviet north western border, Finland still posed a military threat could not be ignored. Despite these shortfalls, it was clear to Finland and the western powers that the Soviet Union gained invaluable combat experience and had made significant improvements in a short period of time. He Red Army's ability to absorb losses and change how it operated during combat was and would continue to be its greatest strength.

Immediately following the Winter War Timoshenko was named the People's Commissar of Defense. His experiences in Finland drove significant changes in the Red Army's training and command structure. In the handover with the former Commissar, Kliment Voroshilov, he identified shortfalls in most every area of the military establishment. Key among the deficiencies was lack of strategic planning for communications, road networks and airfields, and mobilization; inadequate and poor training facilities and cadre; insufficient command structure to meet the growing mobilization requirements; and poorly trained officers, especially among the junior ranks, in combat tactics and command coordination. ⁸⁵ Although many of the issues were subsequently addressed and given a higher priority than in the previous years, force commitments for occupation forces in Poland, the Baltic, and Rumania in conjunction with partial mobilization in early 1941 prevented comprehensive implementation of the reforms. ⁸⁶

The preponderance of the reforms was tactical changes and corrections to strategic direction. Not surprisingly the Red Army failed to recognize shortfalls in their operational design. Political control of military strategy and ideological dogma refused them the ability to look at the problem honestly and they continued to lay blame at the tactical level.

Soviet misinterpretation of lessons learned during the Winter War provides a modern example of the unrealistic expectation of developing operational art during the interwar years. From its experiences, the Red Army should have recognized that all its preparation since WWI failed to address the complexity of war. Instead of examining the war as an interconnected series of events and applying their operational experiences to correct deficiencies in doctrine, the Red Army focused on individual failures and shortfalls. Speaking of the "right conclusions" that the Red Army should draw from the war, Army Commander Second Rank Kirill Meretskov, Commander of the 7th Army, remarked:

The first thing we should bear in mind is this: as a rule in future wars, in the initial period of the war, we will encounter strong defensive lines of the trench type, with concrete, and these lines will be of great depth. Only after overcoming them will the troops be able to engage in manoeuvre (sic) warfare. ... So, the main thing we had not encountered before and of which we did not have a real idea is that it would be deep defence (sic) lines, with concrete and other technical facilities of modern defense. All of this should lie at the basis of operational training of chiefs and tactical training of forces. ⁸⁷

Unfortunately, this prevailing thinking pushed the Red Army leadership to focus training on the specifics of defeating a "Mannerheim Line" defensive system instead of German mobile operations. Bias for the offense and penetrating defensive positions remained key components of Soviet doctrine and deep battle. However, over relying on previous unique battle experiences, the Red Army again failed to see the character of the war with Germany to disastrous consequences in the initial stages of World War II. Only The Soviet Union's strategic depth allowed her to absorb the German attack long enough to develop deep operations into a laudable operational design. Though less catastrophic, The Soviet Union would unfortunately repeat the

mistake of interpreting their successful against Germany into a cookie cutter pattern for operational art in Finland in 1944.

FINNISH THEATER OF WORLD WAR II

On 10 July 1941 Finland opened hostilities against the Soviets as part of Operation BARBAROSSA, the German-lead general attack into the Soviet Union. Called the Continuation War by the Finns and supported by German aviation, its main objective was recapturing the territory lost to the Soviets the previous year. ⁸⁹ The first assaults began in eastern Karelia where the Finns pushed the Red Army back to the pre-1939 border by early September. On the Isthmus operations began in mid-August and had reached the old border by early December. ⁹⁰ Although impressive as the Finnish advance was, and gaining more territory than lost in the Winter War, it failed to achieve any decisive objectives. The Red Army had conducted a determined withdrawal (very similar to Finland's in 1939) trading time for space to an eventual stalemate on all fronts. ⁹¹

The Summer Offensive

1942 and 1943 saw limited operations and the lines stabilized into trench warfare. Soviet offensives saw some success, but were repulsed by determined counterattacks or a simple over extension of their lines of communication. ⁹² In June 1944 The Soviet Union began its decisive operations. Similar to its victory in 1940, the main effort was again on the Karelia Isthmus. The plan was simple, but the timeline was ambitious forecasting achievement of its major goals within two weeks. ⁹³ Applying their successes from previous battles with the Germans, the Red Army relied on overwhelming superiority in tanks, artillery, and aircraft to achieve a penetration and exploit that breakthrough with mobile groups. ⁹⁴ The Soviets massed two Armies, consisting of 270,00 troops, 1,660 pieces of artillery, over 600 tanks, and over 1,500 aircraft for the 45 mile

wide front. In comparison, the 135 mile front of the eastern Karelia (Lake Lagoda) front only had about half of those assets assigned.⁹⁵

The Finns were taken by complete surprise. The bulk of the army defending the isthmus was away on leave and the Red Army's 15 divisions had a 5 to 1 advantage. 96 The Soviet attack was directed against the Finnish 10th Division and began with a massed artillery barrage of over 200,000 rounds. Three Red Army corps punched through the defenses and by the end of the first day had a 6 mile break through. 97 Withdrawing, the Finns sealed off the penetration and reformed on its secondary defensive line. Failing to exploit the breakthrough, the Soviets regrouped and after determined fighting, broke the Finnish second line of defenses on the 15th. 98 Forced back to their third and final formidable defensive line, the Finnish again disrupted a deep penetration through committing reserve units and reinforcing from other sectors. While another penetration on the 17th by an armor-led attack was prevented from achieving deep operations by Finnish counterattacks, the Soviet advance reached and captured Viipuri on 20 June. 99 In less than two weeks the Red Army achieved the rapid drive through the isthmus that took a full month during the Winter War. Over the next two months of fighting the Soviets made little forward progress and despite multiple penetrations, each was sealed off by determined Finnish defenders. 100 Notwithstanding its efforts, Finland was broken and inevitably accepted Soviet terms of surrender in mid-September. 101 Although achieving resounding and rapid success, the Soviets took significant losses of 67,000 casualties in what amounted to less than a month's fighting. When compared to the Winter War's nearly 400,000 casualties in just over three months, it appears that the Red Army reduced its casualties by half. 102 However, considering the relatively small scope of the June offensive the lower casualty is not a credible indicator of success.

During the summer offensive the Red Army showed increased proficiency and application of its doctrine and tactics. The principles of mass and combine arms were evident and applied throughout the fight. However, the Soviets were never able to fully capitalize on their penetrations. Each was either sealed off or the Finns were able to regroup on secondary prepared defensive lines. The question is why were they not able to achieve deep battle? They had all of the necessary elements – manpower and firepower superiority, a well-trained army, and a war tested doctrine. Unlike the Winter War, they understood the nature of the war they were fighting, prepared for that environment, and achieved their major geographic objectives quickly and as anticipated. Despite the conceptual battle of Soviet theory, warfare in Finland remained basically a fight of attrition. The Soviet Union immense economic potential and population base was the backbone of her strategic power and the mass it produced was the driving force of her military success. Soviet operational art, defined by deep battle, is an ideal concept that would have increased tempo and exploited maneuver space in order to achieve objectives more quickly, but victory was never dependent on its realization. In this setting, it appears that sound strategic decisions in allocation of forces and service-level training applied with effective tactics were more important than operational art.

CONCLUSIONS

Within five years the Soviet Union decisively defeated Finland in two wars, but failed to execute its doctrinal concept of deep battle and by its own definition operational art. Although at face value the Red Army's operational design for the Winter War was doctrinally sound, strategic shortfalls nearly lead to complete failure in 1939. Key factors were the misunderstanding of the character of the current fight and fighting the last war(s). Ironically, both of these were supposedly addressed during the interwar period through the inception of

operational art. In the case of the former, the Marxist-Leninist underpinning of Soviet doctrine artificially assumed a worker's revolution, local support for the Red Army, and massed Finnish desertions. When none of this materialized, the Red Army was not prepared tactically for a stubborn resistance or logistically for a protracted fight. Over reliant on her recent combat experiences in Spain and Manchuria, the Red Army went to war without two of the critical maneuver elements of deep battle – the mechanized corps and long range aviation. Both capabilities were necessary for exploiting the rear area and destruction of the enemy's army. In 1944 and despite coherent strategic planning, sound operational design, and tactical proficiency, the Red Army again could not execute deep battle or destroy the Finnish Army. Much as the Winter War four years earlier, Finland's ultimate defeat was simply a result of strategic attrition and not annihilation as espoused in Soviet doctrine.

The Soviets designed operational art as a template for executing its ideologically permeated understanding of warfare. However, that template failed when applied to each of the Soviet Union's first attempts at execution. The efficacy and viability of operational art was only realized after theoretical concepts were tested, deficiencies identified, and corrections made absent of ideology. Clear strategy and sound tactics are the bedrock of warfighting from which operational art is designed. However, only once the changing character of war is deciphered can operational art take form. The Finnish experience shows that operational art cannot be built as an interwar doctrine and be expected to deliver automatic success, but rather it must be crafted once engaged in combat to meet the unique circumstances of the conflict.

When viewed through the lens of the Finnish campaigns, it is clear that the Red Army never fully achieved operational art. They had an operational design in both wars, but never realized operational success. The elusive linkage between tactics and strategy was little more than a

successive erosion of Finnish manpower and material coupled with capturing key geographic terrain. After the Winter War, Chief of the Red Army Staff Shaposhnikov opined that the primary focus of interwar development should be combined arms tactics and not operational art. He said:

Tactics is closely connected with strategy. Without good tactics there can be no good strategy. Therefore we should pay much attention to training and improving co-operation in the army. One may make operational mistakes yet even then victory is not impossible with well-trained troops. ... I am not talking about operational art, that will come by itself; we should train the troops first of all. ¹⁰³

Future adversaries will invariably be familiar with our doctrine and develop tactics that attack our weaknesses. This questions the validity of the emphasis placed on interwar envisioned operational art as the precursor for military victory. The Finnish campaigns of World War II were anomalies compared to the Soviet success against Germany. However, they reiterate that operational art is an elusive concept and cannot be based on theory or prior military success. It is reasonable to expect our next war to have a Finnish campaign and we cannot overemphasis the primacy of operational art at the expense of a wider view of military preparation. Shaposhnikov emphasized that the linkage between tactics and strategy, operational art, will develop as a natural outcome of the experience of fighting. If he is right, military leaders must keep in mind that operational art cannot be practiced, but rather developed once the character of a war has been revealed.

Bibliography

- Anzulovic, Jr, James V. *The Russian Record of the Winter War, 1939-1940: An Analytical Study of Soviet Records of the Winter War with Finland from 30 November 1939.* Ann Arbor: Dissertation Information Services, 1989.
- Aptekar, Pavel. "Falcons or Kites? The Red Army Air Force in the Soviet-Finnish War." *The Journal of Slavic Military Studies* Vol 12, no. No. 4 (Dec 1999): 138-148.
- Bozen, Gregory, J. "The Soviet-Finnish War, 1939-1940: Getting the Doctrine Right." Monograph, School of Advanced Military Studies, 1993.
- Chew, Allen F. "Fighting the Russians in Winter: Three Case Studies." *The Leavenworth Papers*, Dec 1981.
- —. The White Death: The Epic of the Soviet-Finnish Winter War. Lansing: Michigan State University Press, 1971.
- Chubaryan, Alexander O. and Harold Shukman. *Stalin and the Soviet-Finnish War 1939-1940*. Edited by E.N. Kulkov and O.A. Translated by Tatyana Sokokina Rzheshevsky. Portland: Frank Cass Publishers, 2002.
- Corrigan, Gordon. "The Second World War: A Military History." New York: St. Martin's, 2010.
- Deane, William H. "Elements of Operational Design in the Russo-Finnish War." Masters Thesis, Naval War College, 1995.
- Edwards, Robert. In *The Winter War: Russia's Invasion of Finland, 1939-1940*. New York: Pegasus, 2008.
- Glantz, Col David M. "Soviet Operational Art Since 1936: The Triumph of Maneuver War." In *Historical Perspectives of the Operational Art*, edited by Michael D. Krause and Cody R. Phillips, 247-292. Washington, DC: Center of Military History, United States Army, 2005.
- —. Stumbling Colossus: The Red Army on the Eve of World War. Lawrence: University of Kansas Press, 998.
- Irincheev, Bair. War of the White Death: Finland Against the Soviet Union, 1939-1940. Mechanicsburg, PA: Stackpole Books, 2011.
- Karnisky, Robert. "On War and the Winter War." Masters Thesis, Florida State University, 2007.
- Kelly, Justin and Mike Brennan. *Alien: How Operational Art Devoured Strategy*. Carlisle: Strategic Studies Institute, 2009.
- Kipp, Jacob W. "The Origins of Soviet Operational Art, 1917-1936." In *Historical Perspectives* of the Operational Art, edited by Michael D Krause and Cody R. Phillips, 213-246. Washington DC: Center o fMilitary History, United States Army, 2005.
- Korablev, Yuri. *Lenin-The Founder of the Soviet Armed Forces*. Moscow: Progress Publishers, 1977.

- Krivosheyev, Grigoriy. In *Soviet Casualties and Combat Losses in the Twentieth Century (1st ed.)*. Florence: Greenhill Books, 1997.
- Lunde, Henrik O. Finland's War of Choice: The Troubled German-Finnish Coalition in World War II. Havertown: Casemate, 2011.
- Mawdsley, Evan. In *Thunder in the East: The Nazi-Soviet War*. New York: Oxford University Press, 2005.
- McPadden, Christopher Paul. "Mikhail Nikolayevich Tuckachevsky (1893-1937): Practitioner and Theorist of War." *The Land Warfare Papers*, August 2006.
- Menning, Bruce W. "Operational Art's Origins." In *Historical Perspectives of the Operational Art*, edited by Michael D. Krause and R. Cody Phillips, 3-21. Washington DC: Center of Military History, United States Army, 2005.
- Neuman, Sigmund and Mark von Hagen. "Engles and Marx on Revolution, War, and the Army in Society." In *Makers of Modern Strategy from Machiavelli to the Nuclear Age*, 262-280. Princeton: Princeton University Press, 1986.
- Nichols, Thomas M. *The Sacred Cause: Civil-Military Conflict over Soviet National Security*, 1917-1992. Ithaca: Cornell University Press, 1993.
- Orenstein, Harold S. *Selected Readings in the History of Soviet Operational Art.* Fort Leavenworth: United States Army, 1990.
- Pintner, Walter. "Russian Military Thought: The Western Model and the Shadow of Suvorov." In *Makers of Modern Strategy from Machiavelli to the Nuclear Age*, 254-375. Princeton: Princeton University Press, 1986.
- Rice, Condoleezza. "The Making of Soviet Strategy." In *Makers of Modern Strategy from Machiavelli to the Nuclear Age*, edited by Peter Paret, 648-676. Princeton: Princeton University Press, 1986.
- Savkin, V. Ye. *The Basic Principles of Operational Art and Tactics (A Soviet View)*. United States Air Force, 1972.
- Sokolovskiy, V.D. *Soviet Military Strategy, Third Edition*. Edited by Harriet Fast Scott. New York: Crane, Russak, & Company, Inc, 1975.
- Stone, David R. "Misreading Svechin: Attrition, annihilation, and Historicism." *Journal of Military History*, Jul 2012: 673-693.
- Swider Jr, Raymond J. *Soviet Military Reform in the Twentieth Century: Three Case Studies.* Westport: Greenwood Press, 1992.
- Trotter, William R. *A Frozen Hell: The Russo-Finnish Winter War of 1939-1940*. Chapel Hill: Algonquin Books of Chapel Hill, 1991.
- Tuberville Jr, Graham Hall, John F Sloan, and Ali Amad Jalali, . *The Voroshilov Lectures: Materials from the Soviet General Staff Academy*. Vol. III. Washington, DC: National Defense University Press, 1992.

- Tyushkevich, S.A. *The Soviet Armed Forces: A History of Their Organizational Development.*Moscow: Published Under the Auspices of the U.S. Air Force, 1978.
- Vehvilainen, Olli. In *Finland in the Second World War*, translated by Gerald McAlester. New York: Palgrave, 2002.
- White, D. Fedotoff. The Growth of the Red Army. Princeton: Princeton University Press, 1944.
- Ziemke, Earl. *The German Northern Theater of Operations, 1940-1945.* Washington, DC: Center of Military History, 1989.

Endnotes

¹ Bruce W. Menning, "Operational Art's Origins," in *Historical Perspectives of the Operational Art*, ed by Michael D. Krause and R. Cody Phillips (Washington DC: Center of Military History, United States Army, 2005), 10.

² The Soviet Union used the deep battle concept and mechanized forces extensively during the latter stages of WWII against the Germans with great success. Col David M. Glantz, "Soviet Operational Art Since 1936: The Triumph of Maneuver War," in *Historical Perspectives of the Operational Art*, ed. by Michael D. Krause and Cody R. Phillips (Washington, DC: Center of Military History, United States Army, 2005), 253-266. For developmental perspectives also see, Menning, 8-10.

³ Christopher Paul McPadden, "Mikhail Nikolayevich Tuckachevsky (1893-1937): Practitioner and Theorist of War," *The Land Warfare Papers*, no.56W (August 2006): 18.

⁴ Harold S. Orenstein, *Selected Readings in the History of Soviet Operational Art* (Fort Leavenworth: United States Army, May 1, 1990), 6-7.

⁵ Yuri Korablev, *Lenin-The Founder of the Soviet Armed Force* (Moscow: Progress Publishers, 1977), 171.

⁶ Korablev, 168.

⁷ Thomas M. Nichols, *The Sacred Cause: Civil-Military Conflict over Soviet National Security*, *1917-1992* (Ithaca: Cornell University Press, 1993), 15.

⁸ Fedotoff D. White, *The Growth of the Red Army*, (Princeton: Princeton University Press, 1944), 158-163.

⁹ V. YE. Savkin, *The Basic Principles of Operational Art and Tactics (A Soviet View)* (Washington DC: United States Air Force, 1972), 39-46.

¹⁰ Nichols, 38.

¹¹ White, 163.

¹² White, 40.

¹³ White, 170-172.

¹⁴ Savkin, 43.

¹⁵ Orenstein, 65-66.

¹⁶ Jacob W. Kipp, "The Origins of Soviet Operational Art, 1917-1936," In Historical Perspectives of the Operational Art, ed by Michael D Krause and Cody R. Phillips (Washington DC: Center of Military History, United States Army, 2005), 237.

¹⁷ Nichols, 42-44.

¹⁸ David M. Glantz, *Stumbling Colossus: The Red Army on the Eve of World War* (Lawrence: University of Kansas Press, 1998), 29-33. For specific numbers and ranks of Soviet Officers, see Glantz, "Soviet Operational Art Since 1936," 282n1.

¹⁹ Orenstein, 45.

²⁰ Orenstein, 38.

²¹ James V. Anzulovic Jr., *The Russian Record of the Winter War, 1939-1940: An Analytical Study of Soviet Records of the Winter War with Finland from 30 November 1939* (Ann Arbor: Dissertation Information Services,1989), 1.

²² Allen F. Chew, *The White Death: The Epic of the Soviet-Finnish Winter War* (Lansing: Michigan State University Press, 1971), 3.

- ²³ William R. Trotter, *A Frozen Hell: The Russo-Finnish Winter War of 1939-1940* (Chapel Hill: Algonquin Books of Chapel Hill, 1991), 14-16. Also see Trotter page 264 for relative insignificance of gaining ground in Finland when the eventual German attack on Leningrad came from a different direction and the Finns refusal to advance past the 1939 border.
 - ²⁴ Anzulovic, 2.
 - ²⁵ Chew, 3. Also see Trotter 15-16
 - ²⁶ Chew, 3-5. Trotter 16.
 - ²⁷ Anzulovic, 56.
 - ²⁸ Anzulovic, 70-73. Also see Trotter 38-39.
 - ²⁹ Chew, 6,8-11.
 - ³⁰ Trotter, 66.
- ³¹ Brigade Commander Pyotr Pshennikov, commander of the 142nd Rifle Division, highlights shortfalls in manning, training, and equipment during the First Session of the "Meeting of the Command Personnel at the Central Committee for Collecting Experiences from the War, 14 April 1940." Alexander O Chubaryan and Harold Shukman, *Stalin and the Soviet-Finnish War 1939-1940*. ed. by E.N. Kulkov and O.A. Rzheshevsky, trans. by Tattana Sokokina (Portland: Frank Cass Publishers, 2002), 16.
 - ³² Trotter, 36-37.
 - ³³ Irincheev, 10.
 - ³⁴ Trotter, 53.
 - ³⁵ Chew, 8. And Irincheev, 40.
 - ³⁶ Anzulovic, 131. Also see Chew, 71.
 - ³⁷ Trotter, 53-54.
 - ³⁸ Chew, 8.
 - ³⁹ Anzulovic, 131-132. Also see Chew, 133-134.
 - ⁴⁰ Chubaryan, 84-88.
- ⁴¹ Robert Edwards, *The Winter War: Russia's Invasion of Finland 1939-1940* (New York: Pegasus Books, 2008), 152.
 - ⁴² Chew, 10.
 - ⁴³ Chew, 10.
 - ⁴⁴ Anzulovic, 73.
 - ⁴⁵ Irincheev, 105-108.
 - ⁴⁶ Anzulovic, 131-134. Also see Chew, 98-125.
 - ⁴⁷ Anzulovic, 133. Also see Chew, 134-135 and Irincheev, 118-122.
 - ⁴⁸ Trotter, 52-53.
 - ⁴⁹ Chew, 11. Also see Trotter, 52.
 - ⁵⁰ Anzulovic, 73.
 - ⁵¹ Trotter, 102-116.
 - ⁵² Anzulovic, 133-135. Also see Chew, 131-157.
 - ⁵³ Trotter, 67.
 - ⁵⁴ Anzulovic, 72.
 - ⁵⁵ Chew, 15.
- ⁵⁶ Trotter, 69-70. Also see Irincheev, 11 for details on early Finnish efforts to delay the Soviet advance and the effects of the Red Army's interrupted attack.
 - ⁵⁷ Trotter, 63-65.

⁵⁸ Chew, 61-64. Colonel Ivan Rosly, commander of the 245th Rifle Regiment (7th Army), professed the poor tank-infanty coordination and inadequate artillery preparation during December on the Isthmus. Success was only later achieved when he was able to effectively use combined arms tactics. Chubaryan, 14-15. Brigade Commander Filipp Alabushev, 123rd Rifle Division Commander commented on the poor artillery preparation of the defensive position on the Manerhiem Line as a key failure in his division's attacks. Chubaryan, 35.

⁵⁹ Chew, 50-57.

⁶⁰ Chew, 58-59.

⁶¹ For specific accounts of senior commanders publically praising Stalin's leadership. See Chubaryan, 132, 152, 159, 170, 218.

⁶² Anzulovic, 45.

⁶³ The Soviet Union established the Republic of Finland immediately upon the start of the War in an attempt to present an opportunity for Finnish communists to revolt. It received little to no support from inside Finland and most of its support base came from communist Finns expelled during their civil war. See Trotter, 58-61.

⁶⁴ Anzulovic, 51-52.

⁶⁵ Glantz, 82-83.

⁶⁶ Glantz, 88.

⁶⁷ Chew, 27-29.

⁶⁸ Orenstein, 34.

⁶⁹ Pavel Atekar, "Falcons or Kites? The Red Army Air Force in the Soviet-Finnish War," *The Journal of Slavic Military Studies* Vol 12, no. 4 (Dec 1999): 139. Also see Orenstein, 40-41.

⁷⁰ Army Commander Second Rank Kirill Meretskov's comments on how mehcnaized assets were used and refuseal of efficacy of Mechanized Corps. Chubaryan, 135.

⁷¹ Atekar, 144. Speaking specifically of the Karelian Isthmus. Corps Commander Evgeny Ptukhin, Commander of the Air Forces of the Northwestern Front, recalled that "...71% [of the sorties] were focused on troops and the annihilation and demolition of fortifications..." Ptukhin's commentary was during the Meeting of Comammand Personnel. The effectiveness of aviation during the war was dusputed and potentially exaggerated, but his reflection on the percentage of sorties allcoated to the frontlines was not. Chubaryan, 122-123, 126-127.

⁷² See Brigade Commander Ivan Kopets' (Commander of the 8th Army's air force) account of the poorly executed and timed ground operations, lack of adequate air support, and lack of tank mobility. Chubaryan, 99-100.

⁷³ Anzulovic, 137 & 161.

⁷⁴ Stalin was specifically critical of commanders used their artillery sparingly and remarked that the allocation of 230,000 shells per day should have been 400,000. He stated: "One should not spare shells or bullets in a modern war. It's a crime to economise on ammunition." Chubaryan, 95.

⁷⁵ Chew, 141-142.

⁷⁶ Trotter, 36.

⁷⁷ Edwards, 238-239.

⁷⁸ Chew, 170-178.

⁷⁹ For additional reasoning for the Soviet failure to exploit the breach see Edwards, 251. Also see Chew, 158-159.

⁸⁰ Anzulovic, 162-165. Chew, 165-186. Edwards, 257.

⁸¹ Trotter, 77-78.

⁸² Chew, 112-117.

⁸³ Anzulovic, 166.

⁸⁴ Trotter, 264. Chew, 214-216.

⁸⁵ Glantz, 37-39.

⁸⁶ Glantz, 40.

⁸⁷ Chubaryan, 131. Chief of the General Staff of the Red Army Boris Shaposhinskov and Army Comander Second Rank Nikolai Voronov (Chief of Artillery of the Red Army) reiterated Meretskov's preminition that the Soviet Union would face Mannerhiem Line stype defenses in future war. Chubaryan, 180 and 252-253.

⁸⁸ Chew, 215.

⁸⁹ Earl Ziemke, *The German Northern Theater of Operations*, 1940-1945 (Washington, DC: Center of Military History, 1989), 193.

⁹⁰ Ziemke, 190-191.

⁹¹ Chew, 235-236.

⁹² Trotter, 267. Ziemke, 221-223, 242-245.

⁹³ Henrik O. Lunde, *Finland's War of Choice: The Troubled German-Finnish Coalition in World War II* (Havertown: Casemate, 2011), 272.

⁹⁴ Lunde, 279.

⁹⁵ Lunde, 272.

⁹⁶ Olli Vehvilainen, *In Finland in the Second World War*, translated by Gerald McAlester (New York: Palgrave, 2002), 137. Also see Chew, 237-238 for the relative light defenses the Red Army encountered.

⁹⁷ Lunde, 278-279.

⁹⁸ Ziemke, 281.

⁹⁹ Lunde, 287.

¹⁰⁰ Chew, 238-240.

¹⁰¹ Vehvilainen, 138-148.

¹⁰² For the June 1944 Soviet offensive casualties see Evan Mawdsley, *Thunder in the East: The Nazi-Soviet War* (New York: Oxford University Press, 2005), 294. Soviet casualty figures during the Winter War have been heavily disputed, but 350,000 – 400,000 is generally accepted as accurate. See Grigoriy Krivosheyev, *Soviet Casualties and Combat Losses in the Twentieth Century* (1st ed.) (Florence: Greenhill Books, 1997), 77-78.

¹⁰³ Chubaryan, 177.